



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,973	06/28/2000	Gueorgui B. Chkodrov	204005	7611

23460 7590 12/30/2003

LEYDIG VOIT & MAYER, LTD  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6780

EXAMINER

NAHAR, QAMRUN

ART UNIT	PAPER NUMBER
----------	--------------

2124

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/606,973

Applicant(s)

CHKODROV ET AL.

Examiner

Qamrun Nahar

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is in response to the amendment filed on 9/19/03.
2. The objections to the drawings are withdrawn in view of applicant's submission of replacement drawings.
3. The rejections under 35 U.S.C. 112, second paragraph, to claims 28 and 31 are withdrawn in view of applicant's amendment.
4. Claims 32-34 have been added.
5. Claims 1, 15 and 28 have been amended.
6. Claims 1-34 are pending.
7. The objection to claim 32 is pending.
8. Claims 1-22 stand finally rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.
9. Claims 1-22 stand finally rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.
10. Claims 1-22 and 32 stand finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
11. Claims 1-4, 7-17, 20-26, 29 and 32 stand finally rejected under 35 U.S.C. 102(b) as being anticipated by Davidson (U.S. 5,819,093).
12. Claims 5, 6, 18, 19, 27, 28, 30 and 31 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (U.S. Pat. No. 5,819,093) as applied to claim 2 above.

Art Unit: 2124

13. Claims 33-34 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (U.S. 5,819,093) in view of Gershman (U.S. 6,199,099).

***Response to Amendment***

***Claim Objections***

14. Claim 32 is objected to because of the following informalities: "a distributed having" on line 2 of the claim should be "a distributed environment having". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

15. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

16. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 15 have been amended to include the limitation "independent of a breakpoint". The applicant asserts that support for this amendment is found generally on pages 11 and 15. On page 11, lines 16-17, the disclosure states that the thread is halted "by a "break" command inserted into the program code or as a result of an error". On page 14, lines 3-7, the loader module loads the debugger after the thread was halted. Furthermore, figure 4, steps 500

Art Unit: 2124

and 513, contradicts claims 1 and 15 where the “program stops at breakpoint or due to an error” and loading a debugger into a thread of execution of the program.

It is unclear how the thread of execution is halting independent of a breakpoint. That is, is the thread of execution halting due to events other than a breakpoint, if so, then what are the events. The subject matter is not properly described in the application as filed.

Claims 2-14 and 16-22 are rejected for dependency upon rejected base claims 1 and 15, respectively.

17. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 has been amended to recite, “loading a debugger into a thread of execution of the program independent of a breakpoint” and claim 15 has been amended to recite, “halting the thread of execution independent of a breakpoint”.

The applicant asserts that support for this amendment is found generally on pages 11 and 15. On page 11, lines 16-17, the disclosure states that the thread is halted “by a “break” command inserted into the program code or as a result of an error”. On page 14, lines 3-7, the loader module loads the debugger after the thread was halted. Furthermore, figure 4, steps 500 and 513, contradicts claims 1 and 15 where the “program stops at breakpoint or due to an error” and loading a debugger into a thread of execution of the program.

Art Unit: 2124

The specification is not enabling as to how the thread of execution is halted independent of a breakpoint.

Claims 2-14 and 16-22 are rejected for dependency upon rejected base claims 1 and 15, respectively.

18. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

19. Claims 1-22 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

20. Claim 1 has been amended to recite, "loading a debugger into a thread of execution of the program independent of a breakpoint" and claim 15 has been amended to recite, "halting the thread of execution independent of a breakpoint". It is indefinite as to how the thread of execution is halted independent of a breakpoint. That is, is the thread of execution halted due to events other than a breakpoint, if so, then what are the events.

At this point of prosecution, the limitation "loading a debugger into a thread of execution of the program independent of a breakpoint" in claim 1 is interpreted as simply loading a debugger before any breakpoint was set in the program. The limitation "halting the thread of execution independent of a breakpoint" in claim 15 is interpreted as halting the thread of execution due to events other than a breakpoint.

Art Unit: 2124

Claims 2-14 and 16-22 are rejected for dependency upon rejected base claims 1 and 15, respectively.

21. Claim 32 recites the limitation "the context" in line 6 of the claim. There is insufficient antecedent basis for this limitation in the claim. This limitation is interpreted as "context data".

***Claim Rejections - 35 USC § 102***

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

23. Claims 1-4, 7-17, 20-26, 29 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Davidson (U.S. 5,819,093).

**Per Claims 1 (Amended), 2-4, 7 (as best understood):**

Davidson teaches a method for debugging a software program in an distributed environment (col.3, li.29-42) substantially as claimed comprising:

Loading a debugger into a thread of execution of the program independent of a breakpoint; and running the debugger in the thread of execution to debug the program (col.10, li.52-65; col.11, li.27-67 to col.12, li.1-15);

Calling a proxy interface via the debugger, located on a first computer, having a pointer ("object reference"; col.6, li.35-39) to an object located on a second computer (col.6, li.40-46)

Art Unit: 2124

Creating a socket ("communications protocol"; fig.5, ref.74) for communicating with the debugger; and sending commands through the socket for conversion into function calls to the object interface (col.9, li.29-31).

Establishing communication with an external console; receiving a command from the console; and converting the command into a function call to an object (fig.8, col.9, li.10-31).

**Per Claims 8-14 (as best understood):**

Davidson teaches a method for debugging a software program residing on a "computer-readable medium having stored thereon computer-executable instructions;" (fig.1, ref.2; col.7, li.2731).

**Per Claims 15 (Amended), 16-17 (as best understood) and 26:**

Davidson further teaches:

Halting the thread of execution independent of a breakpoint (col.10, li.5-18);

Obtaining and referencing pointer from context data to make a function call to an object from within the process (col.7, li.40-55; col.10, li.5-8; col.10, li.52-67 to col.11, li.1-8)

Establishing communication with an external console; receiving a command from the console; and converting the command into a function call to an object (fig.8, col.9, li.10-31);

Creating a socket for communicating within the thread ("communications protocol"; fig.5, ref.74); and communicating with the console through the socket (col.9, li.29-31);

including allowing other threads of execution to continue (col.10, li.52-65).

Art Unit: 2124

**Per Claims 20-22 (as best understood), 29:**

Davidson teaches a method for debugging a software program residing on a "computer-readable medium having stored thereon computer-executable instructions" (fig.1, ref.4,8 & 9; col.7,li.27-31).

**Per Claim 23:**

This represent the system claim of the method disclosed in claims 1-4 and 7. It is rejected for the same reasons cited above, with the system disclosed as follows (col.3, li.35-42), including "wherein the debugger converts the command into a function call to the object" (col.10, li.52-67 to col.11, li.1-8).

**Per Claims 24 and 25:**

Davidson teaches a system comprising a multiplexor module ('debugger GUI') for multiplexing commands to a plurality of identified debugger modules ("one or more dbx engines"; col.3, li.43-54).

Davidson further teaches appropriate information exchange between said console and the plurality of debugger modules through the use of sockets ("interprocess address[es]"; col.12, li.30-33).

**Per Claim 32 (New, as best understood):**

Davidson teaches a method for debugging a program running on a distributed environment having a thread of execution (col.3, li.29-42), the method comprising:

Art Unit: 2124

Halting the thread of execution (col.10, li.5-18);

Creating a call-frame that will behave as if called from the program at the location at which the thread was halted (col.11, li.20-26);

Loading a debugger into the thread of execution of the program; and running the debugger in the thread of execution to debug the program, the debugger calling objects from context data of the thread of the program (col.7, li.40-55; col.10, li.52-67 to col.11, li.1-8; col.11, li.27-67 to col.12, li.1-15).

### ***Claim Rejections - 35 USC § 103***

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 5, 6, 18, 19, 27, 28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (U.S. Pat. No. 5,819,093) as applied to claim 2 above.

#### **Per Claims 5, 6, 18 and 19 (as best understood):**

Davidson teaches a method for debugging objects in an distributed environment (col.3, li.29--42) in the Distributed Object Environment ('DOE', col.5, Li..'58-62). Davidson further teaches a method wherein specific knowledge of the DOE environment is not required to execute the debugging method in any object-oriented environment (col.3, li.62-65; col.15, li.3743).

Davidson does not expressly disclose that the objects utilized in the invention may be COM or

Art Unit: 2124

DOOM objects. It would have been obvious to a person of ordinary skill in the art at the time of the invention do apply the debugging method of Davidson to COM and DOOM objects. The modification would have been obvious because one of ordinary skill in the art would have been motivated to simplify the techniques and methods used in debugging object-oriented software based on a wide array of systems, as taught in Davidson (col.5, li.66 to col.6, li.9).

**Per Claims 27 and 28 (Amended):**

Davidson teaches a method for debugging a program in a distributed environment (col.3, li.29--42). He teaches said method as a means of simplifying and improving efficiency in debugging programs in a distributed environment (col.9, li.3844). Davidson does not expressly disclose that the server on which the program resides is a web server, or that the program to be debugged is an electronic commerce program. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the debugging method of Davidson to electronic commerce applications residing on a web server. The modification would have been obvious because one of ordinary skill in the art would have been motivated to simplify the techniques and methods used in debugging web-based business software to improve operating efficiency of a web-base electronic commerce application and to reduce software testing cycle complexity as taught: in Davidson (col.5, li.66 to col.6, li.9).

**Per Claims 30 and 31:**

See the rejection of Claims 20-22.

Art Unit: 2124

26. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (U.S. 5,819,093) in view of Gershman (U.S. 6,199,099).

**Per Claim 33 (New):**

Davidson teaches a method for debugging a mission-critical system that facilitates electronic commerce purchases for a large number of consumers over a public network that receives and fulfills the commerce purchases via an internet information server (IIS) module (col.4, li.1-14), the method comprising: remotely accessing the system while the IIS module fulfills the commerce purchases (col.7, li.38-55); executing a thread of a module while a plurality of other threads run concurrently with the thread of the module (col.10, li.52-65); and executing a separate diagnostic thread to service the module independent of halting the module (col.11, li.27-67 to col.12, li.1-15). Davidson does not explicitly teach an active server page (ASP) module. Gershman teaches an active server page (ASP) module (col.60, li.43-47).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Davidson to include an active server page (ASP) module using the teaching of Gershman. The modification would be obvious because one of ordinary skill in the art would be motivated to provide an advantage of a well-known and well-supported framework that provides server-side data to clients.

**Per Claim 34 (New):**

The rejection of claim 33 is incorporated, and Gershman further teaches accessing an object running on a browser by one of the consumers over the public network (fig. 10A, item 1010 and col.36, li.41-57).

### ***Response to Arguments***

27. Applicant's arguments filed on 9/19/03 have been fully considered but they are not persuasive.

*In the remarks, the applicant argues that:*

a) Applicant respectfully traverse the rejections under 35 U.S.C. 102(b) and requests reconsideration of the rejections based on the arguments presented below.

Claims 1-4, 7 stand rejected by Davidson. Davidson teaches a debugger for object oriented programs over a distributed computing system. In particular, Davidson enables application programmers to debug programs using objects on remote servers. To do so, Davidson relies on a debugger engine "dbx-engine" in the remote server. Col. 11, line 27 et seq. More particularly, the dbx-engine is started on the server using a dbxWrapperFactory object, as described with Figure 14. A dbx-engine is not multi-thread safe (NIT safe) and must be created on each remote host and be instructed to attach to a server. A "wrapper server" on the remote host then creates two threads. One thread waits for the Ax-engine to terminate and the other thread waits for a message from the dbx-engine that the dbx-engine is fully started. Col. 11, lines 43-67. When one thread resumes, the other thread is destroyed and the wrapper server is notified, and the dbx-engine is created on the remote host. The new dbx-engine sets a breakpoint in the remote server to check for a match of id, host name and client address. Afterward, the debugger

Art Unit: 2124

on the remote server is implemented and another breakpoint is set on the thread in the remote server according to a call of a trigger function, which is a function which directly calls the function at issue implemented by the user (Col. 11, lines 20-22). After the breakpoint is set for that thread, the server is continued. Col. 12, lines 19-41. Each occurrence of the user-identified function in the Interface Definition Language (IDL), whether automatically generated or not, will cause the breakpoint to fire. Col. 12, lines 46-50. If a check determines that the code is IDL generated code, another breakpoint is set and execution is continued. Col. 12, lines 49-51.

Claim 1 as amended provides for "loading a debugger into a thread of execution of the program independent of a breakpoint; and running the debugger in the thread of execution to debug the program." Support for the amendment is found generally on page 11 and 15 of the Specification. In contradistinction, Davidson teaches a dbx-engine debugger that relies on breakpoints in the thread of execution. Further, Davidson provides a debugger that sets breakpoints in the thread of execution. Davidson neither teaches nor suggests loading a debugger into a thread of execution of a program independent of a breakpoint as claimed, and Claim 1 is allowable. Claims 2-14 depend from Claim 1 and are believed allowable with Claim 1.

*Examiner's response:*

a) Examiner strongly disagrees with applicant's assertion that Davidson fails to disclose the claimed limitations recited in amended claim 1. Davidson clearly shows each and every limitation in amended claim 1. See the rejection under 35 U.S.C. 112, first paragraph and second paragraph, to claims 1-22 above in paragraphs 16-17 and 19-20. The limitation "loading a debugger into a thread of execution of the program independent of a breakpoint" in claim 1 is

Art Unit: 2124

interpreted as simply loading a debugger before any breakpoint was set in the program.

Davidson teaches the limitation as interpreted (col.10, li.52-65; col.11, li.27-67 to col.12, li.1-15), see the prior art rejection above in paragraph 23 for rejection to amended claim 1.

*In the remarks, the applicant argues that:*

b) Claims 15-19 and 26 stand rejected by Davidson. Claim 15 as amended provides for "halting the thread of execution independent of a breakpoint" Support for the amendment is found generally on page 11 and 15 of the Specification. Davidson teaches a dbx-engine debugger that relies on breakpoints in the thread of execution. Further, Davidson provides a debugger that sets breakpoints in the thread of execution. Davidson neither teaches nor suggests halting the thread of execution independent of a breakpoint as claimed, and Claim 15 is allowable. Claims 16-22 depend from Claim 15 and are believed allowable with Claim 15.

*Examiner's response:*

b) Examiner strongly disagrees with applicant's assertion that Davidson fails to disclose the claimed limitations recited in amended claim 15. Davidson clearly shows each and every limitation in amended claim 15. See the rejection under 35 U.S.C. 112, first paragraph and second paragraph, to claims 1-22 above in paragraphs 16-17 and 19-20. The limitation "halting the thread of execution independent of a breakpoint" in claim 15 is interpreted as halting the thread of execution due to events other than a breakpoint. Davidson teaches the limitation as interpreted (col.10, li.5-18), see the prior art rejection above in paragraph 23 for rejection to amended claim 15.

*In the remarks, the applicant argues that:*

c) Regarding Claim 26, the rejection is improper. Claim 26 contains elements not addressed in the Office Action in accordance with 37 C.F.R. 1.104(b). Accordingly, a next Office Action should be non-final in nature. Moreover, Davidson fails to teach "allowing other threads of execution to continue" as taught by Claim 26. Claims 27-31 depend from Claim 26 and are believed allowable with Claim 26.

*Examiner's response:*

c) Examiner strongly disagrees with applicant's assertion that Davidson fails to disclose the claimed limitations recited in claim 26. Davidson clearly shows each and every limitation in claim 26. Claim 26 was rejected under the same rational as claim 15. It was apparent in the last Office Action (Paper No. 7, par. 6), that Davidson teaches allowing other threads of execution to continue. The present Examiner has further clarified that Davidson does teach allowing other threads of execution to continue (see col.10, li.52-65). In addition, see the rejection above in paragraph 23 for rejection to claim 26.

*In the remarks, the applicant argues that:*

d) Claim 23 provides inter alia, that a "debugger converts the command into a function call to the object" unlike Claims 1-4 and 7, accordingly, the rejection of Claim 23 is improper. Unlike Davidson, Claim 23 provides that the "debugger" performs the converting of the command. Davidson provides for a server to perform converting of a command into a function

Art Unit: 2124

call: "The server side libraries 160, 162 convert a request from a client to a call to a user provided function 164 that implements the operation." Col. 9, lines 27-31. Accordingly.

Davidson neither teaches nor suggests that a "debugger converts the command into a function call to the object." Claim 23 is believed allowable with Claims 24-25, which depend on Claim 23.

*Examiner's response:*

d) Examiner strongly disagrees with applicant's assertion that Davidson fails to disclose the claimed limitations recited in claim 23. Davidson clearly shows each and every limitation in claim 23. Davidson does teach that the debugger converts the command into a function call to the object (col.10, li.52-67 to col.11, li.1-8). In addition, see the rejection above in paragraph 23 for rejection to claim 23.

***Conclusion***

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2124

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

29. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (703) 305-7699. The examiner can normally be reached on Mondays through Thursdays from 9:00 AM to 6:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (703) 305-9662. The fax phone number for the organization where this application or processing is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*Kakali Chaki*

QN  
December 15, 2003

**KAKALI CHAKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**